



**Kessel Run
Software Toolchain Management Services (STMS)**

Performance Work Statement (PWS)

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1. INTRODUCTION

1.1. BACKGROUND

The Air Operations Center Weapon System (AOC-WS) program management office (PMO) develops and sustains software applications supporting combat air operations. The goal of the PMO is to migrate our existing legacy portfolio to a more evolvable architecture that can better leverage a cloud environment in order to deliver the warfighter better technology, reduced program sustainment costs, and higher system reliability. The AOC-WS PMO seeks to modernize current applications and leverage the advantages of Cloud computing, Platform as a Service (PaaS), Infrastructure as a Service (IaaS) and adoption of a continuous integration and continuous delivery pipeline in order to get capability out to the field more quickly.

1.2. SCOPE / DESCRIPTION OF SERVICES

This Performance Work Statement (PWS) covers services required for Software Toolchain Management Service (STMS) to support authorized Government representatives and software teams (military, civilians and contractors) to develop and sustain software applications for the modernization effort of multiple software programs supporting operations of the AOC-WS.

2. PERFORMANCE REQUIREMENTS

This section describes the performance requirements for this service contract to manage a software toolchain/toolbox for AOC-WS in support of the modernization effort to develop and sustain software applications for multiple software programs, primarily at a Government-led Software Environment location in Boston, MA, but not limited to supporting multiple AOC geographic sites. The requirements are identified as general outcomes and/or deliverables.

2.1. SOFTWARE TOOLCHAIN/TOOLBOX (TT) MANAGEMENT SERVICES

The DevOps Toolchain is defined as the set of programming tools used to perform a complex software development task or to create a software product within a DevOps Pipeline. The DevOps Toolbox is defined as the wider collection of programming tools from which product teams can choose in order to create their DevOps Toolchain. The stages of the DevOps Pipeline that will need associated tools within the DevOps Toolbox include: Plan, Create, Verify, Packaging, Release, Configure and Monitor.

The contractor shall ensure Toolchain/Toolbox (TT) Management does not delay work planned or impede work conducted in the Software (SW) environment.

2.1.1. SOFTWARE ENGINEERING SERVICES

The contractor shall provide a DevOps SW TT Management Team, consisting of two junior level software engineers, to manage an existing and evolving SW TT. The software engineers shall perform basic software code tasks and shall be responsible for all testing, evaluation and resolution of integration issues of Toolchain.

2.1.2. TOOLCHAIN/TOOLBOX SERVICES

The Toolchain Management team shall perform the necessary actions to maintain the existing and evolving software toolchain/toolbox to include:

- Procuring software and any prerequisite materials, support and training to allow the product to be operational within the SW environment. Ensure software will be free from defect and inoperability. Broken or non-functioning software is fixed/replaced NLT 2 business days.
- License management including Annual renewal.
- Supporting the documentation for accreditation packages and security requirements for the toolchain.
- Maintaining toolchain/toolbox availability, and integrating on the toolchain/toolbox with software/hardware requirements.

2.2. TOOLCHAIN DELIVERY AND INTEGRATION REQUIREMENTS

As directed by the Government, this DevOps Software Toolchain Management Team shall keep up to date the evolving software toolchain/toolbox since new toolchain capabilities are continuously being developed.

The DevOps Software Toolchain Management Team shall procure software within 10 business days from the direction from the government and integrate into the evolving software toolchain/toolbox within 5 business days, after Government tool accreditation. All licenses and warranties shall be transferrable to the government upon completion of the contract.

2.3. SOFTWARE TOOLCHAIN MANAGEMENT SUPPORT SERVICES

The DevOps Software Toolchain Management Team shall provide on-call support Monday through Friday during 0800 – 1800 (EST) business hours to any toolchain/toolbox related issues.

The contractor shall be available during the Software Environment operating hours between 8:00 AM and 6:00 PM, Monday through Friday, excluding Federal holidays (New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving, and Christmas). The contractor may be required to operate after normal business hours if the need arises. The Government shall coordinate other-than-normal operating hours with the contractor as far in advance of need as practicable. Overtime should not be used, but if required shall be justified, coordinated with the contracting officer, and approved beforehand

The contractor shall provide one web developer to maintain and update the Kessel Run website kesselrun.io.

3. CONTRACTOR ACQUIRED PROPERTY AND SERVICES

3.1. SOFTWARE AND EQUIPMENT

The contractor shall provide the equipment, materials, and supplies deemed necessary to operate and manage the software Toolchain/Toolbox. The contractor shall provide a recommendation for

any additional tools, manpower, and support required for successful execution of the contract. Any increase or change in equipment requirements will be managed through a contract modification. All software, hardware and support contracts/warranties shall be transferred to the Government at no additional cost (CDRL A002).

3.2. SUPPLY CHAIN RISK MANAGEMENT

The contractor shall implement a supply chain risk management (SCRM) program and integrate SCRM with the Contractor's overall risk management process to ensure that the delivered system, equipment, components, software, maintenance equipment, and supplies (e.g., spares and repair parts) do not incorporate counterfeit parts, malicious code, or any other elements that would allow adversaries to gain unauthorized access to data and critical program information, alter data, interrupt communications, or otherwise disrupt operations. The Contractor shall ensure their SCRM program complies with the tenets of AFPAM 63-113, "Program Protection Planning for Life Cycle Management"; SAE Aerospace Standard AS5553, "Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition"; and National Institute of Standards and Technology (NIST) Special Publication 800-53, Revision 4, "Recommended Security Controls for Federal Information Systems and Organizations, Information Security, SA-12" for protection of equipment. The Contractor shall incorporate counterfeit prevention methods to prevent procurement of counterfeit materials, parts, and software especially critical system components such as annunciators and critical program information as well as mechanical piece/parts and electronics components procured to support sustainment of delivered systems and assemblies.

3.2.1. ELECTRONIC EQUIPMENT AND SOFTWARE

The contractor shall purchase all electronic equipment and software from the Original Equipment Manufacturer (OEM) or an Authorized Distributor. If the product is not available from either source, the Contractor shall obtain written permission from the PCO to purchase from another identified source. The Contractor shall require their subcontractors and suppliers to purchase from the OEM or Authorized Distributor unless the Contractor obtains written permission from the PCO to purchase from another identified source.

The contractor shall not use refurbished items to support project requirements or sustainment activity.

The contractor shall conduct security scans of all media for malicious code before the media is used in the SW Environment. Upon Government approval, the contractor shall update malicious code protection mechanisms on all computer and laptops within 10 business days of new releases becoming available. The contractor shall perform monthly scans on all of the computer and laptops within the SW Environment. The contract shall identify, report, and correct any SW Environment system vulnerabilities within 72 hours (CDRL A003). For all items not received from OEMs or Authorized Distributors, the Contractor shall test and verify compliance with manufacturer's specifications in accordance with SAE AS5553 required testing. The Contractor shall complete this same level of testing and verification for all items provided by and purchased by its sub-Contractors and suppliers that were not from the OEM or Authorized Distributors.

3.2.2. COUNTERFEIT MATERIAL REPORTING

The contractor shall report all suspected counterfeit material/items to the Government through the Government Industry Data Exchange Program (GIDEP) database and to the program office via e-

mail to the Contracting Officer within 5 working days of discovery. The Contractor shall prominently label all suspected counterfeit material/items and physically separate from all other supplies. The Contractor shall not return or dispose suspected or confirmed counterfeit material/items to the supplier but hold such items for Government analysis and investigation. The Contractor shall aid the Government investigation including providing all documents associated with the purchase, shipping, and other relevant data on the counterfeit materials/items. The Contracting Officer will provide final disposition instructions for confirmed counterfeit material/items to include turnover to the Government.

4. GENERAL REQUIREMENTS

4.1. PROGRAM MANAGEMENT

The contractor shall integrate and coordinate all activity required to execute this contract and manage the timeliness, completeness, and quality of problem identification. The contractor shall provide corrective action plans, timely identification of issues, and effective management of subcontractors. The contractor shall provide a recommendation for any additional tools, manpower, and support required for successful execution of the contract. (CDRL A001).

4.1.1. KICK-OFF MEETING

Within one week of contract award, the contractor shall support a kick-off meeting for the government and team members. The contractor shall introduce team members and staff, and shall present and discuss administrative operations pertinent to performing contract tasks and a general overview of the overall approach to execute this contract.

4.2. ASSOCIATE CONTRACTOR AGREEMENTS (ACA)

Throughout the course of the contract, the contractor may be required to work with, or within proximity to, other contractors within the Software Environment.

The contractor shall enter into Associate Contractor Agreements (ACA) with applicable third party integrators and other stakeholders after contract award for any portion of the contract requiring joint participation in the accomplishment of the requirement. The agreements shall include the basis for sharing information, data, technical knowledge, expertise and/or resources essential to this effort, which shall ensure the greatest degree of cooperation to meet the terms of the contract. The Government will provide specific names of contractors to the contractor.

ACAs shall include, but not limited to, the following general information:

- a) Identify the associate contractors and their relationships.
- b) Identify the program involved and the relevant Government contracts of the associate contractors.
- c) Describe the associate contractor interfaces by general subject matter.
- d) Specify the categories of information to be exchanged or support to be provided.
- e) Include the expiration date (or event) of the ACA.
- f) Identify potential conflicts between relevant Government contracts and the ACA; include agreements on protection of proprietary data and restrictions on employees.

The contractor is not relieved of any contract requirements or entitled to any adjustments to the contract terms because of a failure to resolve a disagreement with an associate contractor. Liability for the improper disclosure of any proprietary data contained in or referenced by any ACA shall rest with the parties to the ACA and not the Government. All costs associated with the ACAs are included in the negotiated cost of this contract. ACAs may be amended as required by the Government during the performance of this contract. The contractor shall submit copies of all ACAs to the Contracting Officer.

5. PERFORMANCE MEASURES/ SERVICE DELIVERY SUMMARY (SDS)

The methods used to assess performance and resolve issues or unacceptable performance is outlined in detail in the Quality Assurance Surveillance Plan (QASP) for this effort.

SDS	PERFORMANCE OBJECTIVE	PWS PARA.	PERFORMANCE THRESHOLD	SURVEILLANCE METHOD	FREQUENCY
1	The contractor shall ensure Toolchain Management does not delay work planned or impede work conducted in the environment.	2.1	Above 98% - Satisfactory Below 98%- Unsatisfactory	COR/Product Manager continuous surveillance	Monthly
2	The software engineers shall perform basic software code tasks and shall be responsible for all testing and evaluation and resolution of integration issues of the integrated Toolchain.	2.1.1	Above 98% - Satisfactory Below 98%- Unsatisfactory	COR/Product Manager continuous surveillance	Monthly
3	-Procuring software and any prerequisite materials, support and training to allow the product to be operational within the environment -License management -Supporting the documentation for accreditation packages and security requirements for the toolchain -Maintaining toolchain/toolbox availability, and	2.1.2	Above 98% - Satisfactory Below 98%- Unsatisfactory	COR/Product Manager continuous surveillance	Monthly

	integrating on the toolchain/toolbox with software/hardware requirements.				
4	Procure supporting software within 10 business days and fully integrate into the evolving software toolchain/toolbox enabling full operation within 5 business days.	2.2	Within 5/10 business days- Satisfactory Greater than 5/10 business days- Unsatisfactory	COR/Product Manager continuous surveillance	Monthly
5	Provide on-call support Monday through Friday during 0800 – 1800 (EST) business hours to any toolchain/toolbox related issues	2.4	Response time less than 10 minutes satisfactory Response time greater than 10 minutes Unsatisfactory	COR/Product Manager continuous surveillance	Quarterly

APPENDIX A: EXISTING PIPELINE

Tool Category	Existing Toolchain
Code Repository	GitLab
CI/CD Orchestrator	Concourse
Compile/Build	IntelliJ
Code Quality Scan	SonarQube / SonarCloud
Security Scan	Fortify
	SD Elements
	ThreadFix
Artifact Repository	Nexus
SW Design	Adobe Creative Cloud
	Sketch
	InVision
Data Analytics	Tableau